

Application No. 10/611,591
Response to Office Action of February 9, 2007

Atty. Docket No. 042390.P17062
TC/A.U. 2157

Amendments to the Specification

Please replace paragraph 1 with the paragraph shown below.

This nonprovisional patent application is related to the following contemporaneously filed nonprovisional patent applications: U.S. Patent Application serial number ~~<042390.P17059>~~ 10/610,989, entitled, "System and Method for Dynamically Configuring and Transitioning Wired and Wireless Networks;" U.S. Patent Application serial number ~~<042390.P17061>~~ 10/611,596, entitled "System and Method for Describing Network Resource Availability and Associations;" U.S. Patent Application serial number ~~<042390.P17060>~~ 10/611,787, entitled "System and Method for Programmatically Changing the Network Location of a Network Component"; and U.S. Patent Application serial number ~~<042390.P17063>~~ 10/611,786, entitled "System and Method for the Design and Description of Networks."

Please replace paragraph 16 with the paragraph shown below.

[00016] Network information 250 (may be derived in part from the network resource and association file and/or a virtual map) describes resources within network 200 and, also, the relationships between those resources. The illustrated embodiment of network information 250 includes: subnet IP address section 260, router section 270, and DHCP server section 280. Related U.S. Patent Application serial number ~~<042390.P17061>~~ 10/611,596 further describes network resource and association files.

Please replace paragraph 25 with the paragraph shown below.

[00025] FIG. 4 illustrates selected elements of exemplary network resource and association file 400. Network resource and association file 400 includes: dynamic network device section 402, non-dynamic network device section 404, power management device section 406, hubs section 408, Virtual Local Area Network (VLAN) switch section 410, router section 412, Dynamic Host Configuration Protocol (DHCP) server section 414, and addressing scheme section 416. A DHCP server refers to a

Application No. 10/611,591
Response to Office Action of February 9, 2007

Atty. Docket No. 042390.P17062
TC/A.U. 2157

network component that provides network administrative services in compliance with Request For Comments 2131 entitled, "Dynamic Host Configuration Protocol," R. Droms, March 1997. As illustrated in FIG. 4, network resource and association file 400 describes available network resources and associations in a standardized syntax. Related U.S. Patent Application serial number ~~<042390.P17061>~~ 10/611,596 further describes network resource and association files.

Please replace paragraph 27 with the paragraph shown below.

[00027] FIG. 5 is an illustration of an exemplary current network state snapshot 500. The illustrated embodiment of current network state snapshot 500 is organized according to one or more subnets sections (e.g., subnet section 505). Each subnet section contains information about one or more network components within the subnet (e.g., node section 510). Node section 510 includes information about potential movement. Information about potential movement may include a list of network topologies based on network topologies and interfaces available to the node. For example, if a node contains an 802.11a network adaptor (and an 802.11a access point exists on the network), the node is able to make a transition to a wireless network connection. Network state snapshot 500 is more fully described in related U.S. Patent Application serial number ~~<042390.P17063>~~ 10/611,786. An 802.11a network adaptor and an 802.11a access point respectively refer to a network adaptor and an access point that comply with the IEEE 802.11 standard, entitled "Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications, 1999 Edition."

Please replace paragraph 34 with the paragraph shown below.

[00034] FIG. 7 illustrates exemplary network configuration request 700. Network configuration request 700 includes subnet group section 705 and device section 710. Subnet group section 705 may be used to organize a plurality of subnet subsections (e.g., subnet subsection 715). Each subnet subsection may list information about the type of network topology requested for the subnet. For example, a particular subnet may include both wired and wireless network topology. Device section 710 may include information

Application No. 10/611,591
Response to Office Action of February 9, 2007.

Atty. Docket No. 042390.P17062
TC/A.U. 2157

about nodes within a requested network configuration and a start position for mobile nodes within a requested network configuration. Network configuration requests are more fully described in related U.S. Patent Application serial number ~~<042390.P17063>~~ 10/611,786.

Please replace paragraph 42 with the paragraph shown below.

[00042] FIG. 9 is a flow diagram illustrating certain aspects of a method for configuring a router interface and a corresponding Dynamic Host Configuration Protocol (DHCP) server interface. Referring to process block 910, a network management agent (not shown) references information (e.g., a virtual map, which may be derived, in part, from the network resource and association file) to determine whether a DHCP server interface and a router interface are associated with the same subnet. The network management agent may reference a file of network components that may include addressing scheme information to identify the addressing scheme used by the listed network components. The referenced file has a standardized syntax in an embodiment of the invention. Network information 250, shown in FIG. 2 and network resource and association file 400 shown in FIG. 4 are examples of electronic files that list network components with a standardized syntax. Network resource and association files are more fully described in related U.S. Patent Application serial number ~~<042390.P17064>~~ 10/611,596.

Please replace paragraph 44 with the paragraph shown below.

[00044] Referring to process block 920, in an embodiment of the invention, the network management agent determines configuration information for the DHCP server interface based, at least in part, on information in the referenced electronic file. Determining configuration information broadly refers to determining information to enable the DHCP server interface to provide network administrative services to network components within a subnet. The network management agent may determine an IP address for the DHCP server interface based on the addressing scheme information in the referenced file. The network management agent may also determine a gateway IP

Application No. 10/611,591
Response to Office Action of February 9, 2007

Atty. Docket No. 042390.P17062
TC/A.U. 2157

address to distribute to DHCP clients within the subnet. In the illustrated embodiment of the invention, the gateway IP address is the IP address of the corresponding router interface. In some embodiments, the network management agent automatically determines the configuration information for the DHCP server interface based, at least in part, on information in the referenced electronic file.

Please replace paragraph 45 with the paragraph shown below.

[00045] Referring to process block 930, in an embodiment of the invention, the network management agent determines configuration information for the router interface based, at least in part, on information in the referenced electronic file. Determining configuration information broadly refers to determining information to enable the router interface to provide a gateway from the subnet to other subnets and/or the Internet. Determining configuration information may include, for example, determining an IP address for the router interface so that the router interface can serve as a gateway for the subnet. In some embodiments, the network management agent automatically determines the configuration information for the router interface based, at least in part, on information in the referenced electronic file.